

Federal Communications Commission Mr. Jeffrey Tobias WT Docket No. 19-140 Stephan Runge T +494074375097

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Our Reference: X01M19006253
Your Reference: WT Docket No. 19-140

02 September 2019

Proposed changes to the Aviation Radio Service rules, 47 CFR Parts 2 and 87 NPRM FCC 19-53, WT Docket No. 19-140

Dear Mr. Tobias

Airbus Commercial Aircraft is pleased to participate in the commenting of this proposed rule change. Our system specialists and Senior Expert Communications & Surveillance have checked your proposal carefully.

Airbus would like to provide the attached comments.

In case of	any question	please do	not hesitate	to contact me.

With kind regards,

(Stephan Runge)

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# **AIRBUS**

## Airbus comments to NPRM FCC 19-53 [incl. A1-A6] (WT Docket No. 19-140)

NPRM 19-53, general comment - AeroMACS

## Airbus comment:

Airbus as a major Airframer, considers AeroMACS which is a service of life service as an airport surface communications system that will allow for increased volumes of data exchanges at airports areas and as an enabler to bring potential significant safety and efficiency benefits to airports and airlines during ground operations.

As the demand for high-bandwidth, data intensive services and applications continues to grow, the global aviation community has adopted AeroMACS to help meet these needs for airport surface communications. The FCC has adopted globally harmonized allocations for AeroMACS in 5GHz band.

The adoption of service rules will help promote manufacturing and investment in new AeroMACS products and services. As an Airframer, we already took into account the AeroMACS integration in our future aircraft architectures and main avionics supplier already have commercial AeroMACS kits available, but large-scale manufacturing remains contingent upon the adoption of services rules in the United States.

As an aviation community, we shall consider and support Airlines and Communication Service Providers needs with the associated spectrum bandwidth associated to Channel management during ground operations.

NPRM 19-53, general comment - Coordination with Telemetry and Satellite Systems

## Airbus comment:

The Channel Manager will help in the coordination with other authorized users in the band such as Telemetry used for Flight Tests systems, and Globalstar (feederlinks), the Channel Manager will act as a single point of contact for non-federal AeroMACS users.

NPRM 19-53, Synopsis, page 6, item 29: *Licensing and eligibility AND*NPRM 19-53A1, page 14 - 18, Items 34 to 44 (including)

## Airbus comment:

The proposed requirement for individual licensing of fixed, base or mobile AeroMACS units seems unnecessary and will lead to additional costs knowing that the information will be available by channel manager.

Proposed licensing regime should be preferably license by rule.

The Commission rule eligibility should not be limited, but extended to other entities such as Communication Network or Service provider, and other like manufacturers, this will avoid artificial barriers to various stakeholders and optimize channel access and use of the AeroMACS band as coordinated by the Channel Manager.

# **AIRBUS**

# Airbus comments to NPRM FCC 19-53 (WT Docket No. 19-140), continued

NPRM 19-53, Synopsis, page 6 & 7, item 31: Coordination and channel management

#### Airbus comment:

Coordination has to be performed by the Channel Manager. A Channel Manager, with oversight from industry participants such as the airport and airline communities, is best positioned to allocate spectrum fairly, efficiently and on a non-discriminatory basis.

Requirement to perform a pre coordination with FAA Regional Offices will surely add delays and costs.

Coordination by the Channel Manager is probably the most efficient way to ensure nationwide consistency for the access to the AeroMACS spectrum.

A Channel Manager will manage the allocation of channels between non-federal AeroMACS users and handle the coordination to the spectrum access for Federal users.

It will be able to maximize the use of spectrum for each specific location according to the demonstrated needs.

### General statement on AeroMACS:

We thank the FCC for seeking comments on Aviation Services Notice of Proposed Rulemaking proposing services rules for AeroMACS.

The Commission's eligibility rules should encourage the deployment of AeroMACS services and applications in promoting role of Channel Manager with license by rule operations and in facilitating the use of the spectrum by other entities such as Communication Network/Service provider, and others like manufacturers, in addition to Airports and Airlines users. As mentioned, the aviation needs quickly modern high bandwidth and secure data networks to continue to ensure safety for the traveling public and to promote increased efficiencies; AeroMACS is one part of our plans moving forward to ensure this. We urge respectfully the Commission to adopt Service Rules as soon as possible.

NPRM 19-53 - A1, page 4 & 5, Items 9 to 13 (including) - Enhanced Flight Vision Systems

### Airbus request to

Item 9: EFVS are airborne systems that can supplement instrument landing system in limited visibility environment.

For the definition of the EFVS, quote:

[...] Enhanced Flight Vision Systems.9 These are airborne systems that supplement instrument landing systems in limited visibility environments (such as fog, haze, smoke, sand, and precipitation) by providing a synthetic vision or computer-generated image of terrain and obstacles.

Unquote

Instead, FCC 19-53, new §87.5 – Definitions [Enhanced Flight Vision System] should be referred here.

### Please note:

EFVS is NOT providing a synthetic vision or computer-generated image of terrain and obstacles. This is actually the definition of Synthetic Vision System (SVS), not EFVS.

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# **AIRBUS**

# Airbus comments to NPRM FCC 19-53 (WT Docket No. 19-140), continued

Airbus comment to

Item 10: EFVS public interest

Airbus acknowledge that EFVS may be helpful for pilots to better identify terrain and runway pattern when approaching in degraded weather conditions.

Airbus comment to

Item 11: Millimeter wave radar for EFVS, last sentence,

quote

"[...] while lower frequency bands require antennas that are too large to fit in an aircraft nose cone"

Unquote.

Airbus view is that it may be possible to accommodate antennas in the nose cone working in lower frequency bands.

Airbus comment to

Item 12 - Sierra Nevada arguments,

quote:

"[...] (1) the device will be used only under adverse conditions and operate at low power, **low altitude**, and for short duration; [...]"

Unquote.

The statement (1) that the EFVS would be used at "low altitude" may be wrong. Depending on the approach flown, minimum required altitude to acquire natural vision may be at 400ft or higher. The pilot may then use the EFVS at these altitudes and non-interference must be shown.

Airbus comment to

Item 13 - 92-95.5 GHz band for Enhanced Flight Vision System radar.

Airbus support the amendment of the actual rule and the permission to use the 92-95.5 GHz band for EFVS with radar. It would definitely improve pilot awareness of terrain and help during adverse conditions to improve airport capacity, in particular airports that are not ILS CAT 2 or 3 equipped.

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